



Compliance With the Coal Tar Sealant Disclosure Act: Guidance for Public Schools and Licensed Day Care Facilities

In consultation with the Illinois State Board of Education (ISBE) and Illinois Department of Children and Family Services (DCFS), the Illinois Department of Public Health (IDPH) issues this guidance as required by the Coal Tar Sealant Disclosure Act ([410 ILCS 170/](#)). Public Act 102-242 (“the act”) affects Illinois public schools, public school districts, licensed day care centers, and state agencies. The purpose of this guidance is to describe the notification and bid request requirements for schools and day care centers that undertake pavement sealing projects after January 1, 2023. The requirements of the act do not apply to the use of coal tar-based sealants or high-polycyclic aromatic hydrocarbon sealant products for roofing repair or construction projects.

DEFINITIONS

The act defines “coal tar-based sealant or high polycyclic aromatic hydrocarbon sealant product” to mean “a pavement sealant material containing coal tar or a high polycyclic aromatic hydrocarbon content greater than 0.1% by weight,” or 1,000 parts per million (ppm).

- **Coal tar-based sealants** are products used to maintain and protect paved surfaces, such as driveways, playgrounds, and parking lots, that typically contain as much as 35% coal tar pitch, an industrial byproduct composed of polycyclic aromatic hydrocarbons.^{1,2} Maine, Minnesota, New York, and Washington, as well as the District of Columbia, have all banned the use and sale of coal tar-based sealants statewide, while the following 10 states have bans within their boundaries: Illinois, Kansas, Maryland, Massachusetts, Michigan, North Carolina, Pennsylvania, South Carolina, Texas, and Wisconsin.³ In Illinois, at least 16 municipalities have banned the use of coal tar-based sealants,⁴ including Evanston,⁵ South Barrington,⁶ Riverwoods,⁷ and Winnetka,⁸ and at least 12 others have government use restrictions,⁹ including McHenry County.¹⁰
- **Polycyclic aromatic hydrocarbons (PAHs)** are a group of more than 100 different organic pollutants widely found in the environment that are often formed during the incomplete burning of coal, oil and gas, garbage, tobacco, or other organic substances.¹¹ You can be exposed to PAHs by breathing air containing PAHs, such as tobacco smoke and smoke from wood fires; by contacting contaminated air, water, or soil near hazardous waste sites; and by eating food like grilled or charred meat.¹² Long-term exposure to PAHs, especially benzo[a]pyrene,¹³ may lead to cancer. Importantly for schools, districts, and day care centers, researchers find that children appear especially susceptible to PAHs.¹⁴
- **Safety data sheet (SDS)** is “a document describing the properties and methods of the handling and use of a substance, compound, or mixture” and containing information with respect to the substance, compound, or mixture, such as the chemical name or common name, physical and chemical characteristics, physical hazards, known and acute and chronic health effects of exposure, the known primary route of exposure, the permissible exposure limit as adopted by the federal Occupational Safety and Health Administration (OSHA), precautions for safe handling and use, and procedures for emergencies, first aid, and cleanup of leaks and spills ([410 ILCS 170/5](#)). OSHA’s Hazard Communication

Standard ([29 CFR 1910.1200\(g\)](#)) requires that chemical manufacturers, distributors, and importers prepare and provide a SDS for each hazardous chemical to downstream users to communicate information on those hazards in a consistent, user-friendly format.¹⁵

HOW DO I VERIFY WHETHER A SEALANT PRODUCT CONTAINS COAL TAR OR HIGH PAHS?

Public schools, public school districts, and licensed day care facilities should be aware of the composition of the sealant products used on their paved surfaces. The primary source of that information is the SDS. Additional information may be found on the sealant product container label. Follow the steps below to find the necessary information on whether a sealant product(s) contain PAHs. If you need assistance determining whether a sealant product contains coal tar or high PAHs, call the IDPH Division of Environmental Health at 217-782-5830 or email DPH.Tox@illinois.gov.

1. Identify the sealant product(s) used for your paved surface(s).
2. Request a SDS from the chemical manufacturer or supplier of your sealant product(s). These documents are often available online as well.
3. Review the SDS and container label(s) to find the ingredients of your sealant product(s) and their percentages.¹⁶
4. Look for words and phrases that indicate coal tar as an ingredient, such as coal tar, refined coal tar, refined tar, refined coal pitch tar, coal tar pitch volatiles, RT-12, tar, or similar items.¹⁷ You may also see the following [Chemical Abstracts Service \(CAS\) Registry](#)[®] numbers denoting coal tar: 65996-92-1, 65996-93-2, 65996-89-6, 8007-45-2, 64742-90-1, or 69013-21-4. A product that itemizes any such words in its list of ingredients is “a pavement sealant material containing coal tar” and thus meets the statutory definition of “coal tar-based sealant” in Illinois ([410 ILCS 170/5](#)).
5. Look for CAS numbers associated with PAHs, such as the following, among others: 130498-29-2¹⁸(PAHs), 50-32-8¹⁹ (benzo[a]pyrene), 83-32-9²⁰ (acenaphthene), or 120-12-7²¹ (anthracene). A product that contains any individual PAH or a mixture of PAHs at a concentration of greater than 0.1% by weight meets the statutory definition of “high polycyclic aromatic hydrocarbon sealant product” in Illinois ([410 ILCS 170/5](#)).

WHAT DO I NEED TO DO WHEN REQUESTING BIDS FOR PROJECTS WITH COAL TAR-BASED OR HIGH-PAH SEALANT PRODUCTS?

The bidding process should begin with a request for the SDS for any sealant product(s) to be used at a public school or public school district. (See information above for verifying whether a sealant product contains coal tar or high PAHs.) Section 10(b) of the act sets two requirements (listed below) for public schools and public school districts requesting bids for pavement engineering projects using a coal tar-based or high-PAH sealant product. This section of the statute does not apply to day care centers.

1. **Request bids with an alternative for asphalt-based or latex-based sealant products.** These alternative products are readily available and can be identified with CAS numbers. Asphalt-based products will have a CAS number of 8052-42-4. Additional alternatives to consider include acrylic, Gilsonite[®], and agricultural oil-based sealants that contain few or no PAHs but tend to be higher priced.²² For new construction, pavement options that do not require sealants include pervious gravel or concrete and permeable asphalt.²³

- a. For more options, visit the [City of Austin, Texas webpage for proper sealant application](#), where the city maintains a list of retail and commercial products that have been tested and approved for use in that jurisdiction, where sealant product(s) containing more than 0.1% PAH by weight are banned.
2. **Weigh the cost of using alternative sealant products for the project against life cycle costs related to pavement preservation, product warranties, and public health and safety.** Asphalt-based products available from hardware retail stores range in price from \$16 to \$42 per five-gallon pail with durability warranties between 1 and 10 years.

The Coal Tar Sealant Disclosure Act does not restrict the amount of PAHs in pavement sealants applied on school or day care center property.

HOW DO I NOTIFY THE PUBLIC ABOUT COAL TAR-BASED OR HIGH-PAH SEALANT PRODUCTS?

Section 10(a) of the act requires that public schools, public school districts, and licensed day care facilities notify all employees and students' parents or guardians prior to any application of a coal tar-based sealant or high-PAH sealant product. The notification must be made by telephone or in writing. If in writing, schools, districts, and day care centers may include the notice in existing publications already in use, such as newsletters, bulletins, calendars, or other correspondence, including email. In addition, notifications must:

1. **Be given at least 10 business days before the application.**
2. **Identify the intended application date and location.**
3. **Include the name and telephone contact number for the school or day care center personnel responsible for the application.**
4. **Include a copy of the SDS that corresponds to the coal tar-based sealant product or high-PAH sealant product, including any health hazards associated with it.**

WHAT ELSE CAN I DO ABOUT COAL TAR-BASED OR HIGH-PAH SEALANT PRODUCTS?

In consultation with ISBE and DCFS, IDPH also recommends that public schools, public school districts, and licensed day care facilities consider the following for communications to employees and students and mitigations to prevent health hazards associated with exposure to PAHs:

1. **Schedule application of coal tar-based or high-PAH sealant products to limit exposure.** The greatest volatilization of PAHs into the air happens immediately after coal tar-based or high-PAH sealant products are used.^{24 25} If using coal tar-based or high-PAH sealant products, schools, districts, and day care centers should schedule application for school breaks or weekends when students and staff are not present.
2. **Briefly explain why alternative sealant products were not chosen.** Illinois statute requires that public schools and public school districts "consider whether asphalt-based or latex-based sealant products should be used" based on factors such as "the benefits to public health and safety" ([410 ILCS 170/10\(b\)](#)). Consider sharing the rationale for using a coal tar-based or high-PAH sealant in the required notification shared with parents and employees.

WHERE CAN I GET MORE INFORMATION?

Illinois Department of Public Health
Division of Environmental Health
525 W. Jefferson St.
Springfield, IL 62761

217-782-5830

TTY (hearing impaired use only) 800-547-0466

DPH.Tox@illinois.gov

<http://www.dph.illinois.gov/>



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- ² Mahler, B., & Van Metre, P. C. (2017). Coal-tar-based pavement sealants – A potent source of PAHs. *Lakeline*, 37(1), 13-18. Retrieved from <https://pubs.er.usgs.gov/publication/70191541>
- ³ Coal Tar Free America. (2017). Coal tar sealer bans. <https://coaltarfreeusa.com/bans-2/>
- ⁴ Ibid.
- ⁵ Pavement Sealant Applicators, 7 Code of Ordinances City of Evanston, Illinois § 18-5 (2017). https://library.municode.com/il/evanston/codes/code_of_ordinances?nodeId=TIT7PUWA_CH18PASEAP
- ⁶ Coal Tar Pavement Products, 17 Village Code of South Barrington, Illinois § 17-3 (2012). https://codelibrary.amlegal.com/codes/southbarrington/latest/southbarrington_il/0-0-0-4786
- ⁷ Prohibition Against Use of Coal Tar Products, 4 Village Code of Riverwoods, Illinois § 6-3 (2018). https://codelibrary.amlegal.com/codes/riverwoodsil/latest/riverwoods_il/0-0-0-1994
- ⁸ Pavement Sealant Applicators, 5 Winnetka Village Code § 5.74.020 (2014). https://codelibrary.amlegal.com/codes/winnetka/latest/winnetka_il/0-0-0-28274#JD_Chapter5.74
- ⁹ Coal Tar Free America, 2017: <https://coaltarfreeusa.com/bans-2/>
- ¹⁰ McKinney, C. (2012). Polycyclic aromatic hydrocarbons & coal tar sealants [PowerPoint presentation]. Woodstock, IL: McHenry County Government. Retrieved from https://ilma-lakes.org/2012/04_PAH_COAL-TAR.pdf
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- ¹² Agency for Toxic Substances and Disease Registry [ATSDR]. (2014, August 28). Public health statement for polycyclic aromatic hydrocarbons (PAHs). Toxic Substances Portal. Retrieved from <https://wwwn.cdc.gov/TSP/PHS/PHS.aspx?phsid=120&toxid=25>
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- ¹⁴ Huang, X., Deng, X., Li, W., Liu, S., Chen, Y., Yang, B., & Liu, Q. (2019, July 27). Internal exposure levels of polycyclic aromatic hydrocarbons in children and adolescents: A systematic review and meta-analysis. *Environmental Health and Preventive Medicine*, 24(1), 1-15. <https://doi.org/10.1186/s12199-019-0805-9>
- ¹⁵ Occupational Safety and Health Administration. (2012, February). Hazard communication standard: Safety data sheets [DSG BR-3514]. <https://www.osha.gov/sites/default/files/publications/OSHA3514.pdf>
- ¹⁶ Minnesota Pollution Control Agency [MPCA]. (n.d.). Choosing alternatives to coal tar-based pavement sealcoats: Guidance for property owners, associations and managers. <https://bapac.pvpc.org/docs/2021/Alternatives%20MN%20Pollution%20Control%20may2013.pdf>
- ¹⁷ Ibid.
- ¹⁸ EPA. (n.d.). Substance details – Polycyclic aromatic hydrocarbons. Retrieved from https://sor.epa.gov/sor_internet/registry/substreg/substance/details.do?displayPopup=&id=84476
- ¹⁹ Ibid.
- ²⁰ ATSDR. (2021, February 10). Toxic substances portal: Polycyclic aromatic hydrocarbons (PAHs). <https://wwwn.cdc.gov/TSP/substances/ToxSubstance.aspx?toxid=25>
- ²¹ Ibid.

- ²² MPCA. (n.d.). Choosing alternatives to coal tar-based pavement sealcoats: Guidance for property owners, associations and managers. <https://bapac.pvpc.org/docs/2021/Alternatives%20MN%20Pollution%20Control%20may2013.pdf>
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